

THE MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, } NO. 268. PHILADELPHIA, DECEMBER 7, 1861. { NEW SERIES, VOL. VII. NO. 10.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

The Microscope: its Value as a Means of Diagnosis in Pulmonary Tuberculosis, illustrated with Cases.

By A. P. DUTCHER, M.D.,

Of Enon Valley, Lawrence, Pa.

Since the publication of our remarks on the diagnostic value of a microscopic examination of the sputa in pulmonary tuberculosis, in Vol. V, page 557, of this journal,* we are happy to find that the views therein expressed are fully confirmed by Drs. J. Hughes Bennett, Andrew Clark, and Theophilus Thompson.

At the time of delivering his clinical lectures on pulmonary consumption, 1851, Dr. Thompson had paid but very little attention to the use of the microscope as a means of diagnosis, and, from a very superficial examination of the subject, he expressed the opinion that very little could be expected from it as an instrumentality in determining the existence of phthisis by an examination of the sputa.

But, fortunately, when he was about to abandon the subject, he had an interview with Dr. Clark, who very readily demonstrated to him the true microscopical indications of tubercular sputa. A short time before his death, Dr. Thompson read a very interesting paper before the Harveian Society, renouncing his former views, explaining the true nature of the tubercular corpuscles, and illustrating them by several accurate and beautiful diagrams.

In this paper, the doctor has shown very conclusively that the sputa of phthisical patients contains materials corresponding in ap-

pearance with the elements present in the air-vessels, and that before any amount of disease can be detected either by the general symptoms or physical signs, there will not be found wanting the withered cells and shriveled nuclei. He also maintains that when the sputa contains, in addition to the withered cells, isolated masses of moleculo-granular matter, fat, and blood disks, with numerous areolar meshes, we may conclude that there is pulmonary disorganization.

In confirmation of these views, Dr. Thompson presents the history of several cases, a brief description of which cannot fail to be interesting to every practitioner who is desirous of adding to his knowledge of the natural history of this malady. We have frequently observed, during the course of these articles, that there is nothing more important than to be able to detect the existence of phthisis in its incipient stage; for, if anything can be done to remedy the disorder, then is the time to act. If this period is once passed, all past experience teaches us that therapeutical measures are of but little avail; and, if a microscopical examination of the expectoration will, in any way, aid us in making out our diagnosis in all doubtful cases, the knowledge which it is capable of affording should not be neglected. That it will furnish such valuable information, has been very conclusively demonstrated by Dr. Thompson's cases.

The first case which he presents is that of a man, aged sixty-three, who, after an attack of pleurisy in the left side, did not regain his usual health. Dull percussion, and prolonged expiratory murmur over a small portion of the right apex, were the only important auscultatory signs; but the expectoration, under the microscope, was found to contain withered cells, blood disks, moleculo-granular matter, and numerous areolar meshes, as illustrated in figs. 1 and 2, which are conclusive signs of phthisis.

* Medical and Surgical Reporter, 1860.

More decided symptoms soon appeared, and he fell a victim to the disease in a few months.



Fig. 1. *a*, withered tubercular cells; *d*, tubercular granules.

The *second* case is that of a lady aged thirty-nine. The first sickness of any severity that she suffered, was during the winter of 1855, and was supposed to depend upon some gastric diffi-

Fig. 2.

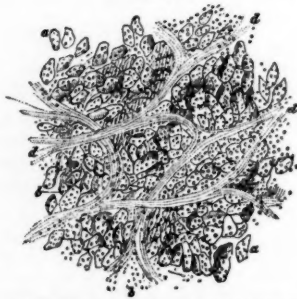


Fig. 2: *a*, tubercular cells; *b*, molecular-granules; *d*, pulmonary meshes in a perfect state.

culty, the precise nature of which could not be accurately determined. The persistency of the disorder and the progressive emaciation led to an exploration of the chest. Some dullness was elicited on percussion, and increased vocal thrill was observed near the sternal end of the second intercostal space on the right side.

The expectoration was carefully examined by the microscope, and was found to contain shriveled cells, lung-tissue, and isolated masses of granules. She was put upon the use of cod-liver-oil, and hygienic treatment of a soothing kind was instituted, and there was a marked improvement in her health. But, early in the year 1856, the expectoration became more copious; dullness on percussion was more extensively obvious; near the inferior angle of the scapula, clicking was audible, shortly followed by cavernous breathing, and other grave symptoms of pulmonary tuberculosis. She died in March.

In this case, almost from the very first, we find the principle signs of the disease in the sputa. Although dullness and increased vocal thrill was observed, with cough and emaciation, yet they did not point out the nature of the malady, for these signs are sometimes present in bronchitis and pneumonia. The microscopical examination of the sputa at once gave a direct clue to a correct diagnosis of the case. This opinion is fully sustained by a third case, which Dr. Thompson presents in contrast to this.

A woman, aged thirty-eight, had precisely the same physical signs; but the occasional slight cloudy expectoration, from time to time examined by the microscope, exhibited ciliary cells, some with long tails, probably tracheal, some in masses, as though from follicles; but there were no tubercular elements. In harmony with the encouraging testimony thus afforded by the microscope, the general symptoms continued favorable, and have, during a period of five years, notwithstanding an accomplished auscultator, had previously pronounced the most unfavorable prognosis.

The following case is given by Dr. T. to show that a microscopical examination of the sputa is useful in confirming doubtful signs. Mr. —, aged fifty, in the winter of 1854, had a cough, copious expectoration, hurried breathing, and some symptoms of hectic. The left lung had been extensively consolidated, in consequence of pleuro-pneumonia, ten years previously. Over a small space, near the lower angle of the left scapula, a sound could be heard, which it was difficult to determine, whether the correct designation were sub-crepitation or clicking.

A portion of the expectoration was sent to Dr. Andrew Clark, for microscopical examination. The doctor reported that it contained shriveled cells; large cells with shriveled nuclei, and some earthy matter. And without having had a previous history of the case, he gave the diagnosis of "slight tubercular deposits tending to restoration," a diagnosis which was confirmed by the subsequent history of the case. The conversion of tubercles into cretacious masses, is generally regarded as a curative process, and when found in the expectoration it is looked upon as a favorable sign. The case, at least, is still considered as hopeful. I have, on several occasions, found cretacious matter in the expectoration, with the microscope, when it could not be detected with the

eye. Tubercular matter, however, may be transformed into cretacious masses in the lungs, without their being an appearance of it in the sputa.

In the summer of 1854, Doctor T—— was called to see Mr. —, aged twenty-two. On examination, there was dullness on percussion, and a murmur over the left pulmonary artery, but no crackle or clicking; the expectoration, however, exhibited lung tissue, tubercular corpuscles, and blood disks. He took codliver oil freely, at one period, to the extent of a pint and a half in a week, and had ioduretted neats-foot oil, (a grain to the ounce,) rubbed into the chest. After a time the expectoration became chiefly bronchial, and free from lung tissue. After spending the winter in Madeira, he returned in the latter part of the spring, quite improved in health.

Dr. Thompson introduces this case to prove that the microscope affords us evidence of amelioration of the pulmonary disorder, and furnishes the medical attendant such indications as will lead him to persevere in the use of such means as will have a tendency to counteract the diathesis and repair the local lesion. Nothing, in our judgment, is more conclusive of amendment, than the disappearance of the withered cells, the shrivelled nuclei and lung tissue in the sputa of a phthisical patient.

The microscope, also, sometimes furnishes very important evidence of the rapidity of the pulmonary disorganization, and its fatal termination. Dr. Thompson illustrates* this by a case, where the individual had been in a decline for two years, but whose friends did not fully realize the danger. Some expectoration sent to him for examination, contained blood, copious corpuscles, and numerous large meshes of pulmonary tissue, perfectly retaining their form and elasticity. A very unfavorable prognosis was given, which was verified by the death of the patient in a few days afterwards.

In this paper, Dr. Thompson gives it as his decided opinion, that the microscopical inspection of the sputa affords, at a very early period of pulmonary tuberculosis, knowledge in relation to the nature of the malady, that is not otherwise attainable. And that the microscopical examination and study of the sputa opens up a very important chapter in the progress of medical science, and that it should not be discarded by those who wish to become proficient in diagnosing the various disorders of the chest.

Dr. Hughes Bennett, of Edinburgh, although at first exceedingly skeptical as to the value of the microscopical examination of the sputa, as a means of diagnosis, has recently added his testimony to its importance, and concurs with Doctor T. in recommending its careful study.

Dr. Andrew Clark, of London, whose name has already been alluded to, has recently published in the *British Medical Journal*, a very scientific article on this subject, and he gives it as his decided opinion, "that the examination of the sputa is useful at all periods, as being the only certain means of detecting the disintegration of the lungs and the increase of the disease."

With such testimony in favor of the value of microscopical examination of the sputa as a means of diagnosis in phthisis, it makes us feel a little combative, when we hear individuals affirm" that there is nothing found in the sputa of phthisical patients, which is conclusive of the existence of the disorder, and that those who claim that there is, are laboring under a delusion." Persons entertaining such views, as a general thing, have never made the subject one of special observation and study, and when they affirm these opinions, we set them down as very little worth.

The introduction of the microscope is a new power in the field of medical practice. And like all intruders, it will encounter hostility and bitter opposition; and no strange thing has happened to it, when it is condemned, before its merits have been fairly examined and fully tested, for the very same thing has occurred to nearly every great discovery that adorns the temple of science. Take, for example, the art of auscultation. For how many years did its advocates encounter the stormy waves of opposition. I can remember the time when they were denounced by those who stood high in the profession. But the scene is now changed; its utility is universally admitted; and there is not an individual in the ranks of the profession, who has any regard for his reputation, that would stand up and seriously controvert its value.

But opposition is not without its use, either in science or morals. Its influence is frequently beneficial in causing more thorough and accurate investigation to be made, in order to furnish stronger evidence in proof of any alleged discovery or improvement. The nature of the principles thus involved, becomes thus better understood, and their limits more clearly de-

finer and definitely settled. Another beneficial result is, that it tends to prevent too hasty improvements or changes in practice, which would otherwise occur, as growing out of new discoveries. As a general thing, such transitions as have a tendency to produce a radical change, either in society or science, to be useful must be *gradual*. The understanding must be thoroughly enlightened, all the intricate principles connected with the subject must be unfolded, and when submitted to the analysis of reason and judgment, they illumine the mind, and the murky clouds of error flee before the brilliant light of science.

Remarks upon the Treatment of Fractures of the Femur by Weights and Pulleys.

By J. SWINBURNE, M.D.,

Of Albany, N. Y.

In Vol. 2d, page 214, of the *American Medical Times*, will be found the synopsis of a paper read by Guerdon Buck, M.D., and entitled "*A new method of treating fractures of the femur.*"

Here he entirely does away with long splint and confines the limb by means of an elastic perineal belt, and an elastic extension apparatus to the foot, and connected with a rope which passes over a pulley and attached to a weight.

I was among the many who had the pleasure and good fortune of listening to the lucid and able production of that accomplished surgeon. It gave me great pleasure to see others working in the field of humanity to rid us if possible of some of the cumbersome machinery now in use for the treatment of fractures.

The doctor has certainly demonstrated one point which is of importance, and that is, that it is not the *splint* but the efforts of nature which unites the bone, and that our duty clearly is to place the bones as nearly as possible in apposition, and nature is not slow to do the work; and that the more nearly the bones are in apposition the sooner will union take place.

The doctor, however, very modestly, like true genius, makes no claim for originality, but says that "this method was suggested to him by observing its happy application by H. C. Davis to the treatment of morbus coxarius."

I have examined the subject carefully, and viewing it in the most powerful light can see

no analogy between Davis' splint and the weights and pulley. The apparatus for the treatment of morbus coxarius whether Davis', Sayers, or any other, seeks to obtain fixed points, *i. e.* extension and counter-extension. The apparatus is confined to the hip by the perineal belt, and to the foot or knee by means of adhesive plaster, extension is then effected and maintained so as to remove the pressure from the diseased joint, and overcome spasm of the muscles, which, by acting powerfully, occasionally dislocate the hip joint. Now, this is exactly the grand desideratum in the treatment of fractures, *i. e.* extension to the normal length and maintenance of the same until union takes place. Does Dr. Buck's apparatus effect this end? Let us see what it does do. The doctor uses the elastic perineal belt, as well as an elastic extension foot belt, and depends upon a weight passed over a pulley to maintain the requisite extension, and not the permanent extension, as is the case in the instrument for hip-joint disease. And here it seems to me that he is presuming too much upon the strength of muscles, while one leg is comparatively weak, another of the same apparent strength is much stronger, and requires much more weight to maintain proper extension. Dr. Buck stated "that by this arrangement elasticity is combined with extension." Elasticity in the Davis apparatus is very small, there being only a short bit of elastic tubing in the perineal belt, and this can as well be dispensed with. The question naturally arises as to how much force is required to maintain extension when once fully effected? I find very little force is requisite, and little uneasiness is manifested by the patient under treatment, where extension is positively maintained, even less than where elastic straps and weights are used to effect the full normal extension, and particularly where spasmodic action of the muscles have full sway, as is familiarly demonstrated in veterinary surgery, *e. g.* pulling of the horse's tail, it will be noted that every source of irritation causes the animal to spasmodically draw it down, even the presence of a fly will bring on spasm of the organ. Now, suppose it was important to maintain the tail in this position. I think other means besides weights and pulleys would have to be used to effect the desired end. You would require to place it, 1st, in the desired position and maintain it there. There is another point to which I would call attention. In Dr. Buck's plate (exhibited

at the meeting of said society,) representing his mode of treatment, his counter extending perineal belt is entirely too small. He cannot maintain the requisite length of limb without producing excoriation and perhaps slough, (which he acknowledged had occurred in one instance.) The next objection is, that the belt extends through the centre of the body and over the horizontal portion of the pubis, which would be very likely to produce slough from any great pressure being applied over it—besides this, the counter extension is at least four inches out of the long axis of the femur. This belt should be two inches in diameter for an adult, and passed over the groin at a point where the tissues are soft, while the two ends of the belt should join just over or above the crest of the ilium, and thence upward by the side of the body, that its line of traction may be in the direction of the long axis of the femur. As to the necessity of elastic lateral support in the form of india-rubber circular straps and pieces of splints encircling the thigh to follow up the shrinking of the limb as the swelling subsides, I have yet to learn that nature does not effect all these requisites without the aid of the elastic bands. The skin and cellular tissue stretches and contracts each in its turn to accommodate all the whims of nature.

Dr. Buck stated that he could not claim for the method which he advocated the same good results as Dr. Swinburne, by *simple, fixed extension* and counter extension. He says, "I have a case now under treatment for the last four weeks, where the shortening is one inch."

Through the politeness of the resident surgeon at the New York City Hospital, I saw several (I think about twelve) patients under treatment by Dr. Buck's method, and under his special supervision some of them. The patient had stretched the elastic perineal belt to the degree that the knot at the sole of the foot rested against the foot of the bed, or the weight rested on the floor. In these cases, the limb would be materially shortened. Others, to ease the perineal belt, would draw themselves up in bed until the belt was lax. I found, however, that it possessed this advantage over the long splint, that, if there was any distortion at all, it was in the long axis of the bone, and hence presented no apparent deformity. This is also true of fixed extension and counter-extension.

As to its "maintaining uninterrupted and efficient extension," I think him mistaken, if he means extension to the normal length of the

limb. Among all the cases under treatment, there were none with less than half inch shortening; while some of them were one and a half inches short. Still, to the eye, they appeared perfect, from there being no lateral deformity.

His enumeration of second, third, and fourth of its advantages, are equally applicable to fixed *extension* and *counter-extension*, which does not require splints to complete the dressings. Counter-extension is made, according to his plan, by a piece of "India rubber tubing three-quarters of an inch in calibre, stuffed with a skein of cotton or lamp-wick." This is passed through the perineum, and so "in the direction of the *long axis* of the *body* (not the long axis of the *femur*) to the head of the bedstead." In conclusion, I will state some of the objections to the use of elastic extending and counter-extending bands, with weights and pulleys:

1. It admits of spasmodic contraction of the muscles.

2. It presumes that all muscular tissues are equal in tone and strength, which is by no means the fact.

3. Were there to be applied a trifle too much weight, the object would be defeated by absolute separation of the bone.

There is much difficulty in ascertaining the exact degree of weight necessary; and this difficulty is increased by the elastic band for counter extension and that for extending. Should you apply a weight apparently sufficient, you may find, at your next visit, that the muscles have relaxed more than sufficient. If you reduce the weight, you may find, at your next visit, that the limb is too short. Again: if your patient stretches his extending band, by drawing himself down in bed, so that his foot rests on the foot-board, the weight only expends its force upon the foot-board, or else rests on the floor.

In *permanent* extension, however, it is obvious that none of these inconveniences can by any possibility occur. Both methods possess in common this advantage, that if the limb happens to be too short from overlapping, in no instance can there be any deformity, as the straight line will always be maintained.

The method of extension is extremely simple, and can be carried out by any surgeon who can measure from the anterior spinous process to either malleolus.

In cases of intra capsular fractures, I have, of late years, dispensed with the perineal belt,

and the result equalled my most sanguine expectations, and warrants its continuance. The treatment consisted of weights and pulleys, and elevating the foot of the bed. Patients thus treated were even more comfortable than when lying in bed without any dressings at all, and certainly the results are more favorable, and some of my cases have resulted so well that the gait does not discover any faulty condition of the limb, nor does measurement reveal more than from three-quarters to an inch of shortening, while the patient says there is no difference in the two limbs.

Although this method is so applicable to the aged and enfeebled, it would be presuming too much to seek to apply it to fractures generally, and particularly those occurring in younger persons. From my own experience, it appears insufficient for the treatment of *any* but intra-capsular fractures.

By this means the body impinges against the bed, which acts as an inclined plane, and really plays the part of Dr. Buck's counter-extending elastic belt.

If extension were used in this way, in every case of intra-capsular fracture, I trust we should find less impacted intra-capsular fractures. This impaction is oftener caused by muscular contraction than by any other means. The bones cannot so readily ride by each other outside of the capsular ligament, and hence the bony *impaction*.

Diphtheria and Diphtheritic Paralysis.

By DR. J. WILLIAMSON.

Of Ottumwa, Iowa.

I propose to give you a few lines on Diphtheria, Diphtheritic Paralysis, and Spinal Meningitis, which you can dispose of as you think best.

Diphtheria has prevailed here since the spring of '60, and has manifested itself in every conceivable form. For the past six months there were but few fatal cases, and these were mostly of a croupal character. The laryngeal fibrous deposit appeared in very many others, which made a happy recovery, although, perhaps, for a period of one or two days, no one could feel any assurance that each hour would not be the last. In many instances the fibrinous membrane was detached, and under the use of emetics was discharged in considerable

quantities. Some specimens were the size of a dime, of a clear lustrous white color and tough leathery consistence. The emetics used were always chosen with reference to this depressing effect. Alum, sul. zinc, sul. copper, were used more than any others. In some cases an emetic was given as often as once every twenty four or thirty hours, in succession. Quinine and brandy being used simultaneously, as the powers of the system were seen to flag. Of this class, thus treated, five out of every six recovered.

As the season advanced, the disease assumed a greater malignancy, most of the cases passing through a tedious convalescence. Pallor, petechiæ, and great nervous prostration, spoke in unmistakeable terms how deeply it had struck into the fountains of life. In a few cases gangrene occurred, commencing as a dark red point on the forehead or nose, and gradually deepening in color and enlarging, until the patient died. In one case, the gangrene involved the extremities—two fingers of one hand and a finger and thumb of the other. The last few hours of the patient's life the march of the gangrene was surprisingly rapid, travelling over the whole of the first of the bones of the little finger, and an inch over the metacarpus, in about seven hours. Besides the gangrene of the hands, this patient's nose, ears, forehead, and chest, exhibited numerous circular points, varying in size from those of a pin's head to a quarter of an inch in diameter. It may be noted, that this patient had gone through a severe attack some four months previous, although he seemed to have recovered his usual health before he was attacked the second time. His last illness was but a week's duration.

The treatment of this class of cases, consisted in the use of brandy, quinine, iron, and chlorate of potash internally, with nit. of silver to the throat. My experience with this article has been such, as to induce me to lay it aside as useless, if not positively injurious, and I have nothing to say in favor of local medication, beyond what may be necessary to keep the mouth well cleansed. An experience reaching to nearly four hundred cases, has afforded me an opportunity to try every article that I had seen recommended, as well as many of my own devising, and all have proved alike unsatisfactory. I have doubted whether my local applications in any degree subdued the hyperæmia, much less limited the fibrinous exudation.

As the epidemic assumed a more malignant type, local paralysis was superadded, and im-

posed a most tedious and embarrassing convalescence.

Paralysis of the pharyngeal muscles, rendering the swallowing of liquids impossible, was the most common form. Partial amaurosis was witnessed in one case. A few months later, and cases appeared in which the paralysis was more general.

August '61 afforded me the first case of paraplegia. It occurred in a child two years old. The attack came on with fever, which lasted four or five days. As the fever abated, it was noticed to gradually lose the power of moving both legs and arms; up to this time there was some redness, but no exudation in the throat. From this point there was a gradual return to health, leaving the paralysis, which to day is as complete as at any time previous. More than three months have passed, in which iron, strychnine, quinine, passive motion, frictions, rubefacients to the spine, have been faithfully tried to no effect.

A few weeks later, a second case occurred, differing from the other in the absence of fever and sore throat. Some swelling of the cervical glands existed; further than this nothing existed to point out the existence of diphtheria until it was noticed, by the mother, that it had lost all power of holding up, or in any way controlling the movements of the head. In its complete helplessness it was, as the mother expressed it, more like a pumpkin than the head of a two years old child. Its cry was peculiar, much like the whining of a puppy. A day or two elapsed, and its arms and legs dangled as dead appendages to the trunk. Now began to appear some of the common marks of diphtheria; fauces slightly hyperæmic, tonsils somewhat enlarged, and presenting the peculiar honeycomb appearance, so often seen in this disease, but no membranous deposit was to be seen at any time. The child's general health was soon restored under the use of tonics and stimulants. Substantially the same treatment was adopted, as with the first, using however, in the course of the treatment, a greater variety of articles, strychnine, tinct. iron, tinct. cantharides were made the main reliance. The child slowly regained control over the movements of the head; voice has become natural, and the use of the arms is in some degree restored, but the lower extremities remain without any perceptible improvement.

A third case, presenting some points of divergence from either the above came under notice

October 14th. The patient, a lad of ten, when brought to me by the mother, who assisted him to walk, swayed back and forth like a drunken man, and was, with difficulty, made to keep the sidewalk. This unsteady gait, with an occasional deep inspiration, and a disposition to lock his hands over his head, showing that the muscles of respiration were also involved, afforded the only evidence of disease.

A candid statement, in regard to the nature and probable course of the disease, occasioned me the temporary loss of the patient. He passed into the hands of a quack, who tinkers in law, medicine, and divinity, who steamed and stimulated externally and internally about two weeks for his "nervousness," but as he grew worse daily, I was requested to take him under treatment again. By this time the case was hopeless, the paraplegia was complete, respiration was performed with great difficulty, and food was refused because of the great difficulty of swallowing. The last three days preceeding his death, the mucous and salivary secretions became so abundant, and were so tenacious, and on account of the paralysis of the pharyngeal muscles, so difficult to get rid of, that his life was in hourly jeopardy from suffocation.

He lived but five days after I resumed attendance. The immediate cause of his death I should say was paralysis of the respiratory muscles. Unsatisfactory as had been the results of the treatment adopted in the cases before treated, I could think of nothing, which to my mind, promised better success. Electricity I was not prepared to make use of, or I should have tried it. The urine of this patient was tested for albumen, but yielded no positive results.

While this case was under treatment, a younger brother was affected with strabismus; a day or two later a paraplegia was established. Gave ergot and strychnine. He is nearly well, but I do not claim it as the effect of the treatment.

How shall such cases be treated? And what shall we say of their occurring without previous well-marked diphtheria? Will it be claimed they are sequelæ, that the disease had existed in a mild form, and passed unnoticed. It should be remembered that in the present state of public apprehension, the slightest hoarseness and complaint of the throat, receive an unusual degree of attention. Do not such cases go far to settle the question as to

whether diphtheria is, or is not in the beginning a local disease?

On this point take another case for illustration. Two days ago I dismissed a little girl who had been sick of diphtheria. To-day the mother tells me that for twenty-four hours, she (the mother) has been unable to see objects with any distinctness. Complains of headache, pain in the back, vertigo, and faints with every attempt to walk across the floor. The throat presents a little redness, but no exudation. Are the general symptoms the result of the local disease, or can we admit that there is any intimate relation between them?

Take another case. October 18th was called to see a little girl of eleven years who had been sick two days of diphtheria, so slight as to hardly claim attention. Was said to have had a little fever two days before. At 3 o'clock, P.M., she was feeling quite well, was interested in her book as much as usual, and insisted on going to school. Prostration came on, and in two hours she was dead.

The local affection was here but slight, the exudation was in no degree abundant. That it had anything to do with her death is so absurdly impossible, that my mind refuses to entertain the supposition for one moment.

I had intended to report some cases of spinal meningitis, but lest I should become too tedious I will only give a few facts. Since the time diphtheria made its appearance here, nine cases of spinal meningitis have come under my notice. I had practiced medicine in this community the eight preceding years without seeing or hearing of a case. Other practitioners report a number of cases occurring in their practice.

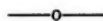
Of the nine cases alluded to, six were children and three adults. In one it followed diphtheria. In another it came on while the patient, an adult, was suffering from a severe attack of the same. In none of the rest was any connection discoverable. The symptoms, which were best studied in the adults, were not violent in the beginning; but little constitutional disturbance. In most cases there was a slight fever for two or three days, after which, while other symptoms might be aggravated, the fever abated. Great tenderness of the spine, pressure upon which would in some cases develop violent muscular contractions. In one case the noise of a wagon passing alone the street was frequently sufficient to bring on the most painful spasms, lasting for ten or fifteen minutes.

In most of the cases the muscles of the back and neck were in a state of rigid tonic contraction, coming on about the time the fever abated, and lasting with the life of the patient, or until convalescence was established. In the cases that recovered, they became convalescent in from ten to fourteen days, although neighboring physicians report cases lasting four and even six weeks.

Of the nine cases six proved fatal. One of these was fairly convalescent, when a careless nurse allowed it to fall to the floor, and a return of the symptoms, and in a few days death was the consequence.

The treatment which seemed to promise most, was stimulants and tonics, especially quinine and chlorate of potash.

In viewing these cases it is difficult to avoid the conclusion, that this is but another form of diphtheria. But how shall I treat my cases of paralysis?



THE character of the true physician shines the brighter for the surrounding gloom and darkness of death, when reason gives hope.

"Cool thro' the veins your pleasing comfort glides, the heart beats glad,
The fresh expanded eye and ear resume their watch,
And life shoots swift thro' all the lightened limbs."

The great Author of our faith and means of our salvation, when upon earth, did not disdain to practice the healing art—giving eyesight to the blind, opening the ears of the deaf, and loosening the tongue of the dumb, expanding the shriveled limbs, and causing the lame to leap for joy. A profession thus stamped with the signet of Divinity, should not be pursued as a trade nor made merchandize of; but as a Divine Art, held in hands purified in the holy waters of benevolence and charity, and guided by principles of righteousness—not for gain alone, nor the vain world's applause, but for the love of humanity. Let no one enter within the sacred portals of its temple pharisaically, but rather as a humble worshipper at its most holy shrines, that he may return justified. In view of the character of the true physician, approaching that of Divinity itself—well did the Roman orator, in the fervor of his affection for the profession, and the freshness of his feelings, exclaim—

"Homines ad Deos nulla re proprius quam accedunt salutem hominibus dando."

[Dr. McPhail's Address.

Liebig's Patent.—Baron Liebig has just had patented in this country a process for electroplating the silvered surfaces of mirrors with copper and other metals with the object of protecting them.

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

Nov. 27, 1861.

MEDICAL CLINIC.

Service of Dr. L. J. Ludlow.

DYSENTERY—CHRONIC PERITONITIS.

This was the case of a female, 54 years of age, who had, when she came into the house, well marked symptoms of dysentery, with frequent bloody evacuations, which she says came on first as a diarrhoea, but for ten days past have been more or less bloody, for which she was placed under the ordinary treatment—enemas, blue mass, acetate of lead and opium, and suppositories, with the effect of arresting the discharges in part; they are still mucous. In addition, she has taken the favorite preparation in this house for such cases, viz., the burnt brandy and tannin, under the use of which she has improved. In the treatment of dysentery, rest, and the recumbent position, are all important, and especially in this case, because there is, in addition to the other symptoms, prolapsus of the rectum, a complication which sometimes occurs also in children, and occasions not only great alarm, but is exceedingly annoying, and to reduce which requires some skill in manipulation.

But, you will observe, this patient is exceedingly feeble; dysenteric discharges tend strongly to produce an anæmic condition; her pulse is feeble; tongue clean, indicating no disturbance of stomach; but her abdomen is enormously distended, protuberant, and tympanitic; less so upon the right side, however; there is no tenderness, nor is there any pain; she is apparently very comfortable; there is now no blood in the discharges; they are a brownish yellow in color, and are less frequent. What is the condition presented here? There has evidently been some peritoneal inflammation of a chronic character, and some adhesions are probably the result, and there is no doubt gas in the peritoneal sac. The prognosis is unfavorable, and yet recovery is possible. The absence of pain, and of nearly all sensibility, the patient lying in this apparently easy, comfortable condition, is not an omen of favorable results. A similar case occurred recently in this house, which proved fatal, the patient being very much prostrated on entering, and being in the wards only twenty-six hours before she died. Such may not be the result in this case. The only treatment which I think necessary to prescribe, in addition to that already employed, is to rub the whole abdomen with an ointment composed of

R. Potassa iodidi,	ʒi.
Camphoræ,	ʒj.
Cerat, simp.,	ʒi.

Her diet should be nourishing and strengthening, and stimulating according to circumstances.

10*

GENERAL CACHEXIA ARISING FROM AN ALTERED OR POISONED STATE OF THE BLOOD.

A volunteer, from Ohio, who was in the battle of Bull Run; health always good, stout, and robust. Three weeks after the fight he was taken with nausea, and pain in his side, with some dyspnoea; pain sharp; slight cough, with rusty expectoration. Took potash, he says, and got better in a week, but did not return to ranks; stayed about the tent; no appetite. Finally was discharged, and came on here; was at Refreshment Saloon Hospital, and went from thence to Military Hospital on Christian street, where he was sick in bed, the pain in side and dyspnoea being the prominent symptoms, which have entirely disappeared. From that hospital he came here. You observe the peculiar dusky hue of his countenance; his eyes have the same hue; his pulse is very feeble, no volume; skin dry; tongue slightly coated, edges red; his respiration is good; no tenderness of abdomen, but slight flatulency; spleen not enlarged; chest resonant on percussion, with some sub-mucous rouschus in the back part, slight dullness over liver, which is slightly enlarged; urine dark colored, but no deposits; complains now of no pain, but constantly inclined to sleep; strength failing, and he is gradually becoming more feeble, and intellect more sluggish.

There is in this case no lesion of any organ apparent, which should give rise to these symptoms, but there is a general torpor of the whole system. The lesion is apparently in the blood, which has become poisoned. Several cases of this nature have come under my observation, in soldiers returned from the war, the prominent symptom in which was the same general torpor of the system, with a gradual sinking of the powers of life, as you observe in this case.

What treatment should be pursued? In each of the cases I have referred to, the remedy used was the chlorinated water, or water saturated with chlorine gas, or when that cannot be procured, Labarraque's solution of chloride of soda, a teaspoon full every two hours, and the result was the speedy and effectual recovery of the patients, in each instance. Chlorine, I have observed to act well and favorably in all these cases of evident blood poison. How it acts we may not be able to determine definitely, whether from the presence of chlorine or azone, you may speculate. This man should be kept quiet. I will give him no quinia, as he has taken sufficient elsewhere, and the state of his brain appears to contra-indicate it; counter-irritants may be applied over the region of the liver, and he may take the remedy just mentioned, together with the best diet the house will afford, and moderate stimulation, and I shall expect a favorable result.

P. S.—Since the above report, the patient has left the house with all his symptoms improved. Intellect clear, and hue of skin changed to a more ruddy and natural tone.

—o—

A Hospital Income.—The *British Medical Journal* says that the annual income of St. Bartholomew's Hospital, London, is about \$180,000.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. GIBBS, M.D.,

AN INTERESTING CASE—BRAINS AT A DISCOUNT.

Since the authentic statement of the recovery of the man who had a crowbar driven through his head, we are prepared to believe almost anything in regard to recoveries after head and brain injuries. In fact, we are not quite sure but that an idiot might have his brains removed, and those of a dog put in their place, and he recover, with at least the common intelligence of a dog.

Apropos, we would remark that we once heard a noted quack relate a case in a bar-room, to a crowd of credulous listeners, to the effect that he once took a male patient, suffering from inflammation and gangrene of the intestines, from the hands of a regular physician. He ordered a sheep to be brought to the door; he then immediately opened the man's abdomen, removed the intestines, and then turned and opened the abdomen of the sheep, and, removing its intestines, placed them in the place of the diseased human intestines thrown away. The only accident following so heroic a procedure, was the circumstance of the man being delivered, a few weeks after, of twin lambs!!

But to the case under consideration. In the *American Medical Times* for October 19th, Dr. George B. Wilson, of Port Huron, Mich., reports a case of injury of the brain, of a very severe nature, in which recovery was speedy and complete. In firing a gun, it exploded, and the breech pin and other matters were driven into the forehead. The foreign substance was removed with much difficulty. "The mass consisted of a screw, about three inches in length, and the breech-pin of the gun, through the middle of which the screw passed at nearly right-angles. The breech-pin was a piece of iron about the size and shape of a good sized little finger, tapering at one end to a tolerably sharp point, and at the other end being cylindrical and blunt, and of about five-eighths of an inch in diameter. The large end had lain upwards, and the pointed end downwards, and being small enough at the point, had probably protruded into the back part of the orbit. The next step was to find and extract such other fragments of iron or bone as had been driven into the brain by the explosion. As the cavity now seemed quite large, in fact, as if all the anterior and a part of the middle lobe of that hemisphere had been destroyed, I did not hesitate to scoop out the disorganized cerebral substance with considerable freedom, and I do not think there could have been much less than a teaspoonful extracted. I then probed the wound deeply with my finger, and in passing it back where the larger end of the breech-pin had lain, I felt, at the depth of over four and a

half inches (by measurement,) two pieces of bone plate, each nearly half an inch in diameter lying, back in the posterior lobe of the cerebrum. These I extracted with long, narrow forceps, and afterwards several smaller pieces, and many particles (mere crumbs) of bone from other parts of the cavity." There was nothing peculiar about the dressings. On the fourth day, "the cerebral substance had grown so as to fill the cavity to the skull." The dressings consisted of a firm compress and bandages. This caused so much pain, that the attendants permitted the removal of the dressing, and *hernia cerebri* resulted. Three days after the second dressing, the Doctor saw the case, and by strapping down tightly a firm compress, the brain tumor was confined within the cranium, and confined there without regard to pain. The author says: "He was able to walk about in less than three weeks after the accident, and felt well most of the time, having to take medicine internally only twice." He was discharged cured at the end of the fifth week.

A singular experiment was performed in this case. While the cranium remained open, the Doctor inserted his finger "as far as it would reach back," touching the brain substance at various points, and inquiring after the sensations. The sensation which determines locality, and the sensations of hardness, softness, coolness, or warmth, were perfect; in fact, the patient said he "could feel everything in there just as plainly as in any other part of his body."

It seems a little surprising that four days should be sufficient for the reproduction of so large a portion of brain substance—large in actuality, and relatively to the whole—and that healthy and perfect in all its functions.

DYSENTERY.

In the *Boston Med. & Surg. Journal* for Aug. 29th, Dr. C. D. Griswold, of Cleveland, Ohio, has an article upon dysentery, in which he seems to think he has succeeded in pointing out a method of treatment that will be found more speedy and successful "than that generally advocated by text-books and the profession." Dr. Griswold regards dysentery "as essentially a malarious disease." While in the service of the Panama Railroad Company, at Rujio Saldado, he says he "soon learned that quinine was as essential in cutting dysentery short, as it was in accomplishing the same end in the treatment of the intermittent and remittent fevers—thus sustaining the opinion as to its malarious origin, instead of regarding the fever as a complication, as some would have it."

That dysentery may be modified by malarious influences, when occurring in certain localities, we have no doubt; neither do we doubt that, under such circumstances, quinine may form an important part of the treatment. But while making these admissions, we must say, we know it may, and often does, occur apparently independent of that specific malaria which develops intermittent or remittent fever. It was our pleasure to be born and reared to manhood in a locality where the above mentioned fevers were never known to originate, and it is now

our pleasure to practice in a locality in these respects similarly situated, and yet in both these localities dysentery was and is by no means an unknown disease. It may be more common in malarious regions than in others, but this does not establish the fact that it has a malarious origin.

In the treatment of this disease, he condemns blood-letting, calomel, cathartics, conjointly, or alternating with opiates, and gives the following as that preferred by him: "The practice which I have found pre-eminently successful, consists mainly in the administration of powders composed of Ind. rhei, grs. ij.; opii and ipecac., aa. gr. ss. In preparing these powders, I triturate the ingredients thoroughly in a mortar, combining a little white sugar. When there is indication of acetous fermentation in the stomach and bowels, add a little subcarb. soda. When there is obstinate constipation, increase the rhubarb; if the bowels are relaxed, lessen it. If fever runs high, increase the ipecac. until nausea is produced. The rhubarb will work its way through the bowels, and carry the opium to the seat of the disease, (the italics are ours,) preventing the formation of scybala, or the necessity of other cathartic remedies. When there is no fever at the commencement, I give quinine to the adult in four-grain doses, alternating with the above powder, every third hour. When there is well marked pyrexia, wait until a distinct remission before giving the quinine; it should be continued until 16 to 20 grains are taken, or cinchonism is produced. With this simple treatment, commenced early in the disease, the great majority of cases will be cut short within forty-eight hours, and the patient may be permitted to go about his business.

Referring to the part of the sentence italicised, we would inquire of the Doctor if he supposes that the good effects of opium in this disease are due to its local action?—To its action by contract? Does the rhubarb carry the opium down to the diseased surfaces, then leave it to do its work, while it (the rhubarb) passes off? We suppose the good effects of opium are due to its systemic influence—to its absorption into the system. If opium can, by combination with a cathartic, be so hurried through the bowels as to prevent its absorption, the good effects it is capable of producing will be correspondingly diminished. We would not be understood as objecting to the compound—we simply object to the explanation of its action.

Dr. Griswold does not speak favorably of cathartics in dysentery. Bearing upon this point, a distinguished physician and surgeon, and for some years a public teacher of medicine, who joined the Ohio volunteers, and has been in active professional employment since in Western Virginia, says:—"By the way, I have had very decided success in the treatment of both this (camp) dysentery and diarrhœa, with the employment of Rochelle salts purgatives." For several years back we have been in the habit of using Epsom salts in certain combinations, and with the most satisfactory results.

In the *Berkshire Medical Journal* for August, Prof. Wm. Henry Thayer has a very able and interesting article upon this subject. We make one quotation: "Since 1852 I have followed a very different plan in the treatment of dysentery. My patient is put at once on frequently repeated small

doses of a saline cathartic. I commonly employ the sulphate of magnesia in doses of one drachm, repeated every four hours. The object is not to get rid of scybala. If I had any reason to suspect their presence, I should give a full cathartic dose of castor oil at once. The object is to relieve the inflammation (or if used at the outset, the congestion) of the mucous membrane, by procuring a free serous discharge from its surface. That this effect is produced, to the great relief of the symptoms, and usually to the speedy cure of the disease, I have frequent evidence. This will be better understood if I describe the course. A patient is having frequent dysenteric discharges, with all the other symptoms. He gets one drachm of sulphate of magnesia, in concentrated solution, (which is important,) every four hours. The next day I find that his discharges have become large and watery, with little mucus and less blood, are less frequent and less painful. If they have thus improved, I reduce the frequency of the salts, but have it continued every six hours. On the second day my patient has only one or two discharges, watery, and absolutely without blood or mucus. The medicine is ordered once in eight hours, and the next day I find he has had no evacuation at all, and the medicine is omitted. This is the end of the case—for he goes two or three days without any evacuation, if he is careful, and then has a natural discharge. The pain and tenesmus have usually disappeared at the end of the first twenty-four hours, without any opium whatever. This is the history of four cases in five of dysentery, when I see them at the beginning. If the case is more advanced, it does not yield so readily, and may require an opiate at night, while the salts are given during the day. I have sometimes given the salts less frequently, with less favorable results. I have had reason to think that when the symptoms did not yield, it was because the medicine was taken at too long intervals. I prefer to withhold opium, in order that the salts may have their full effect; during the first day, the patient can be soothed and relieved by sinapisms and fomentations, with flannel bound around the body; and after this the pain is relieved. My own favorable experience of this mode of treatment has been corroborated by others. I am unable to recollect the source from which I first derived the idea, but I have endeavored ever since to disseminate it, and I have had the pleasure within the last six months of seeing the plan advocated in several medical journals."

We commenced the use of epsom salts in dysentery, in 1855, and its action has pleased us so well that we have sought for no better remedy. We have, however, used it in combination, and, in the last six years, have not lost a case of dysentery, with one exception. The exception was the case of a child under one year of age, to which we were called after several days duration of the disease, and the remedy could not be, or, rather, was not administered.

In May, 1855, Dr. D. B. Dorsey, of Cincinnati, Ohio, in a letter to Prof. George Mendenhall, gave his method of treating dysentery, in which letter he thus sums up his experience: "More than twenty years' experience in the use of this agent, has convinced me that there is not a more reliable one in

the *Materia Medica*. In a practice, not very limited, in the cities of Wheeling, Va., and Steubenville, Ohio, in the latter of which dysentery prevailed as an epidemic, twice or thrice, during my residence there, I had the high gratification of seeing all recover who were treated with this remedy from the commencement of the attack, except an elderly lady who had chronic dysentery for twelve years, and who did not take the medicine as prescribed."

This letter from Dr. Dorsey was published in the *Western Lancet* for June, 1855. Dr. Dorsey said he had used the remedy for twenty years, and first learned it from Dr. F. Lemoyne, of Washington, Pa. Whether original with Dr. Lemoyne or not, is not stated, and we have no means of knowing. We are certain we never saw the remedy suggested in this disease, until we saw Dr. Dorsey's letter in the number of the *Western Lancet*, above referred to.

Dysentery is one of the plagues of the camp, and is, perhaps, the most fatal disease to which soldiers are subject. In view of this fact, and in view of the hundreds of thousands of our loyal countrymen who are now more than ever liable to this disease, anything concerning the subject, especially if pointing out a more than usually successful method of treatment, is of the first importance. Believing the treatment which Dr. Dorsey learned of Dr. Lemoyne to be more than usually successful, and believing it not to be generally known, we shall quote the particulars of that treatment: "Take of saturated solution sulph. magnesia, *seven fluid ounces*, aromatic sulphuric acid, *one fluid ounce*,—mix. The saturated solution is prepared by dissolving epsom salts in an equal quantity of water, by weight, at 60 deg. Fahrenheit. It will be ready for use in eight or ten hours. During that time it should be shaken occasionally."

The medium dose of this medicine for an adult, is one table spoonful, diluted with two or three ounces of water, every four to six hours, until it gently moves the bowels. It should be given regularly, and perseveringly, until the bowels are manifestly under its influence, which will be evinced by feculent discharges, abatement of tenesmus, and general feeling of relief. The size of the dose and times of repeating it must be varied by the practitioner's judgment, according to many circumstances of age, violence and stage of disease, &c. Sometimes it will require two table-spoonfuls of the medicine every three or four hours, at others a tea-spoonful every six or eight hours will be sufficient.

Accompanying each dose, when the pain and tenesmus are great, one-sixth of a grain of sulph. morph. may be given. But this remedy, also, must be varied, both in quantity and frequency of repetition, according to circumstances."

This is the manner in which we have used the epsom salts in dysentery, and the formula has more than answered our most sanguine expectations. Dr. Dorsey makes one other remark, in regard to this combination, deserving of mention, viz: "In those cases attended with a typhoid type of fever, it seems to be peculiarly beneficial."

In cases of dysentery tending to prostration, with more than usual prostration, Prof. Thayer speaks very highly of the oil of turpentine.

ANOPLASTY BY HETEROGENEOUS TRANSPLANTATION.

In the *San Francisco Medical Press* for April, Dr. A. J. Bowie reports a singular case of anoplastic operation, successfully performed upon the penis. The necessity for the operation was occasioned by a sloughing ulcer, "involving one-half of the glans, longitudinally, commencing at the meatus, and extending backward about three inches." When the slough separated, it left a deep excavation throughout its whole extent. "At this stage of the disease, the organ presented a frightful appearance, the glans being supported, in contact with the body of the penis behind, almost entirely by means of the urethra."

An attempt was made to replace lost tissue, and prevent deformity, by transplanting integument from the thigh. At the end of five days perfect union had taken place between the heterogeneous structure, and two years later "the organ presented scarcely any mark of the operation."

ASTHMA TREATED WITH OXYGEN.

In the April number of the *San Francisco Medical Press*, Prof. I. Powell has an article upon the treatment of asthma. After enumerating a number of remedies, he says: "Better still is oxygen carefully prepared and set free in the sick room, or inhaled from an ordinary gas-bag, diluted with one, two, or three measures of atmospheric air, as the case may seem to demand. In this manner I have relieved some of the most obstinate cases of asthma almost instantly, and the dyspnoea would not return for several hours; and when it did recur, a repetition of the inhalation was attended with the same happy results."

For the relief of a paroxysm of asthma we have found nothing to answer our purpose so promptly nor so well as the inhalation of chloroform. It is not necessary to carry the inhalation to insensibility—relief occurs far short of that.

Dr. Powell makes another practical suggestion, in regard to the use of oxygen, that requires further attention. He says: "In accidental poisoning, by burning charcoal in a closed room, a casualty that not unfrequently occurs in cold climates, I am satisfied that the inhalation of oxygen would resuscitate more promptly than any other agent."

A New Treatment of Diabetes.—A correspondent of the *London Medical Times and Gazette*, says, that Mr. Semniola, of Paris, claims to have successfully treated diabetes by faradisation of the vagus nerve. He says that the sugar in the urine is diminished, as well as the quantity of urine itself. The effects of a single application do not, it is stated, last more than from five to eleven hours, requiring its repetition. Strychnia and cold douches are given as adjuvants to the treatment.

REVIEWS AND BOOK NOTICES.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES; INCLUDING THE RESULTS OF RECENT INVESTIGATIONS UPON THE SUBJECT. By FREEMAN J. BUMSTEAD, M. D., Lecturer on Venereal Diseases at the College of Physicians and Surgeons, New York; Surgeon to St. Luke's Hospital, etc. With illustrations. Philadelphia; Blanchard & Lea, 1861. pp. 680.

To practical men, works on venereal diseases have always been exceedingly unsatisfactory. The diversity of views of venereal pathology, and the equal contrariety of venereal therapeutics, left the reader with little for practical application, gained by their perusal, but yet at the same time somewhat disgusted by the malignancy with which opposing views were pressed. Every reader, then, will be glad to know that something definite is really determined on the nature and treatment, which is agreed to by those who have had the most extended opportunities of observing venereal diseases, and that we have at last a treatise which collates all known data and sets forth the subject on a really scientific basis.

When the important bearing of the discoveries in venereal pathology which have been developed within the last decennial period are considered, it will be admitted how little we had heretofore known on the subject, and how long in the darkness of empiricism we had been blundering in the treatment. The reasoning which formed much of the superstructure of syphilography had been founded in error.

The most startling recent proposition which practical men have been obliged to admit, has been the duality of chancreous virus—one kind infecting, producing hard chancre; the other non-infecting, producing soft chancre or chancoid. Recent observations have also determined the innocuousness of the secretion of the infecting chancre when applied to the individual himself, or even to any individual affected with the syphilitic diathesis. The admission, after proof by numerous experiments and frequent observation in practice, that the secondary manifestations of syphilis can be directly communicated to a healthy individual, is the result of the labors of the last few years, yet in opposition to the previous teaching of the highest authorities. That the disease when communicated from secondary lesions necessarily appears first as a chancre, just as when infected by a primary chancre, has also been but recently admitted. Recent times, too, have proven the invariable regularity of the incubation period of the true infecting chancre, as well as the invariable appearance of the secondary symptoms after primary inoculation of true syphilis, and also the total inefficiency of the so-called abortive treatment. The remarkable phenomena connected with the late experiments in the new practice of syphiliza-

tion, have added much to the interest of the subject.

Thus it will be seen what a revolution syphilography has undergone, and it will be admitted how important has a renewed attention to the subject by practitioners become.

Probably every practitioner has observed among his venereal patients, how uncertain and irregular were the subsequent manifestations of the disease. One patient would have an ulcer on his penis followed by bubo in his groin, and all heal without further trouble; while another patient with venereal sore and bubo would suffer from the most terrible consequences of constitutional infection.

This has heretofore been attempted to be explained by constitutional idiosyncrasies of individuals. Hunter, who had noticed these irregular phenomena, advocated this doctrine. Abernethy seems to have tacitly admitted that chancreous virus is not uniform, for he remarks in his *Essay on Venereal Diseases*, that "it is from the effects on the constitution alone that we can judge whether they are syphilitic or not." Carmichael seems to have been the first to assert the plurality of chancreous poisons. But to Ricord and his pupils, particularly to M. Bassereau, is due the credit of the thorough proof of the fact. It is related by M. de Meric that Ricord many years ago asserted to him that "some day distinct origins will be found for the infecting and non-infecting chancres." Ricord also recorded, in 1851, his observation that in the experiments in syphilization, the inoculation of soft chancres always produced soft chancres, and that in a single instance in which pus from a hard chancre had been employed, a hard chancre was the result; and remarked, that if these results were constantly obtained, we should be forced to conclude that there are differences in syphilis which do not depend alone upon the condition of the individual upon whom the cause acts, but upon differences in the cause itself."

The following propositions, stated by Dr. Bumstead, give in brief what is now known in regard to chancreous inoculation:

1. Among persons free from previous syphilitic taint, each of the two species of chancre is transmitted in its kind; the simple chancre as a simple chancre, limited in its action to the neighborhood of its site; the infecting chancre as an infecting chancre, followed by constitutional manifestations.

2. A primary sore with a soft base, and unaccompanied by induration of the neighboring lymphatic ganglia, in a subject already infected with syphilis, will, when communicated to a person free from syphilitic taint, give rise to a hard or soft chancre, according to the nature of the virus which occasioned the first mentioned ulcer.

3. The virus of the non-infecting chancre is a poison distinct from that of the infecting chancre.

4. Phagedenic ulceration of a chancre does not depend upon a specific difference in the virus.

We have said this much on what is the most important subject treated of in the book, with the object of showing to practitioners, who almost all meet with venereal cases, the propriety of acquiring a knowledge of modern syphilitic pathology, and the rationale of the therapeutics which has been deduced.

The volume is, as it professes to be, a full and comprehensive treatise on venereal diseases, and a plain and practical guide to their treatment. The mechanical execution of the work is in the invariably elegant and substantial style of the leading medical book publishers of Philadelphia.

ON THE SOUNDS CAUSED BY THE CIRCULATION OF THE BLOOD: being a Thesis read in the University of Dublin, for the Degree of M.D., at the winter Commencement, 1860. By ARTHUR LEARED, B.A., M.D., Dublin, and *ad eundem oxon*; M. R. C. P.; London; M. R. I. A.; Physician to the Great Northern Hospital and to the Royal Infirmary for Diseases of the Chest, Lecturer on the Practice of Medicine, &c. John Churchill, London. 1861. Pamphlet, pp. 22.

In the January number of this journal, we reviewed a work by the same author, "On the Causes and Treatment of Imperfect Digestion," and expressed our appreciation of his labors in preparing a most useful and practical work; he has, in the meanwhile, not remained idle nor content with his title of "M. R. I. A., but has claimed and obtained the degree of "M.D." from that ancient and honorable school of medicine, the University of Dublin. The Thesis, then and there defended, is well worthy of publication, as it contains original experiments upon an interesting subject, viz: "on the sounds caused by the circulation of the blood;" and, although we cannot agree with him in his conclusions, as we believe, from experiment and observation, that the sounds of the heart depend upon the action of the valves, still we honor him for the industry and talent displayed in his work and experiments. He commences his subject by stating that it is a matter "not merely of interest, but of great importance to determine the causes of the sounds produced by the circulation of the blood. But, while the labor bestowed on it has been proportionably great, the want of general principles is amply proved by the very contradictory results. Even in the explanation of the different sounds by the same authorities, there is much discrepancy. The explanation about to be given "he considers consonant with general laws, and is certainly more comprehensive than any other that has been proposed."

He considers that two essential circumstances relative to the formation of sound, have been overlooked by all investigators—the effect of

pressure on the blood in the heart and vessels, and the effect of the consistency of the blood.

The first thing to be established was, that rapid movements of fluid produce sound, independently of any action, as friction or vibration, upon the vessel in which the fluid is contained. This he proves by experiment; the nature of the apparatus and position of the stethoscope could only be understood by examination of the wood-cut which is given in his work. He first employed water, and, in order to test the effect of viscosity, he filled the apparatus with glycerine.

The following two important principles (he considers) were established by these experiments: first, that sounds may be formed by the motions of fluids only; second, that the quality of a sound thus formed is materially influenced by the nature of the fluid.

Our limited space will not permit us to give his remarks and experiments in extenso. We will, therefore, conclude this brief notice with his conclusions, based upon his investigations.

"If the motion of the blood through the heart and arteries were equable, no sounds whatever would be produced in a state of health. But the blood is, by the action of the heart, thrown into impetuous and interrupted motions, and these give rise to normal sounds, known as the first and second sounds of the heart: both are formed in the outlets of the two great vessels,* and the mechanism of both is essentially the same.

"The first sound coincides with ventricular systole, and is caused as follows: Blood having been forcibly driven from the ventricles into the aorta and pulmonary artery, comes into forcible contact with blood in these vessels, which, supported by the semilunar valves, had attained a state of momentary repose.† The impact between the fluid in motion and that in a state of rest gives rise to the sound.

"Four conditions are necessary for the production of the perfect first sound:

- "1. Sufficient viscosity of the blood.
- "2. Sufficient force in the circulation.
- "3. Sufficient pressure upon the blood.

"4. The absence of obstruction at the outlets of the heart.

"The second sound occurs during diastole, and in its mechanism closely resembles the first. The blood having been driven with much force into the aorta and pulmonary artery, a portion of it recoils, but is checked in its rapid descent towards the heart by the semilunar valves.

* On this point, the assertion of so competent an authority as Cruveilhier is worth quoting. In his examination of the remarkable case of an infant born with the heart exposed, he found that the maximum intensity of both sounds was at the same place—the base; and he observes, "hence it is at the base of the organ we are to look for the cause of these sounds."—*Cruveilhier, Gaz. Medicale de Paris, 1841.*

† I shall afterwards show that there can be little doubt that a secondary propulsion of blood occurs from the elastic contraction of the arteries constituting their systole. But this does not affect the general truth of the above, since the blood resting immediately upon the valves must remain almost, if not absolutely, at rest.

The sound is caused by the concussion thus induced, the force of which is, however, by no means sustained by the valves alone, for they are thoroughly supported by the ventricles and their contents.

"This is obvious, since there can be no approach to a vacuum in the heart. The valves are to be regarded as separating media, which do not themselves sustain the force of the descending blood."

A valve thus supported is known in the arts as an "equilibrium valve." The most fatal objection to our author's reasoning is the experiment of Valentine and others, which was that, when the semilunar valves were held back by curved needles, no second sound was heard.†

L. T.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, DECEMBER 7, 1861.

FEES AND FEE BILLS.

It is believed that those who in remote ages, practised the healing art gave their services without reward. Whether this apparent liberality was owing to a low appreciation of the real value of such services, or to a difficulty of setting a price as an equivalent to the benefit rendered, we know not. Perhaps the fact that the priests were the first healers influenced the gratuitous character of the services. Or it may have been because the healing art was once looked on as an innate gift, a sort of charming power, which as it was lost to its possessor on demanding fee, the healers were obliged to be content with what the generosity of their patients awarded.

In times more modern, physicians have continued the same course. Itinerant surgeons, as the lithotomist Frère Jacques, in the seventeenth century, who left the amount of his fee to be determined by the patient, but refused anything but a very small amount. How general was the practice of refusing good fees we know not, but it was never universal. Mayerne, the physician of James I. of England, and Henry IV. of France, and other monarchs, once, it is related, visited professionally a friend who, expecting to have his fee refused, thought that he would make a show of generosity and deposited a large amount before the physician.

† See Kirke's Manual of Physiology, Amer. ed., 1857, p. 93; also Dalton's Human Physiology, second ed.

Mayerne grasped the gold, and to the expressed dismay of the patient, pocketed it. "Sir," said Mayerne, "I made my will this morning, and if it should appear that I refused a fee, I might be deemed *non compos mentis*." Perhaps Mayerne's test of mental soundness in a physician, would be acceptable with practitioners at the present time.

The earliest legal enactments determining the fees of physicians in England made them very low. An old Welch law fixed the compensation for dressing a wound to be the right to demand as payment merely the blood-stained garments of the patient. The salary of Wye, the physician of Edward III. of England, was about twelve-pence a day.

The good practice of feeing a physician at the time of his visit, seems to have been in olden times appreciated, and the characteristic forgetfulness and ingratitude of patients in regard to medical services was good warrant for it. Patients feel liberal at the time of being relieved from suffering, but soon forget their obligations. An old rhyme says that:

"When the devil was sick, the devil a saint would be,
But when the devil got well, the devil a saint was he."

From which it may be inferred that his satan-ship should be made to pay for medical services at the time when rendered. The same ingratitude is thus quaintly rhymed:

"God and the doctor men alike afore,
Just at the point of death, and not before.
The danger past, they're both alike requited,
God is forgotten, and the doctor slighted."

The policy of getting the fee at the time when services are most appreciated, is illustrated in the following:

"Three faces wears the doctor when first sought,
An angel's—and a god's, the cure half wrought:
But when that cure complete he seeks his fee,
The devil looks less terrible than he."

The rule in China with the doctors is "no cure, no pay;" but it is said that the Emperor's physicians are paid while the monarch is in health, and receive nothing during his illness, making it their policy to keep him in health, and to quickly restore him when sick.

The guinea fee, still demanded by the higher class of physicians in England, was customary, perhaps, nearly two hundred years ago. An au-

thority, dated in 1700, says that "to a graduate in physic his due is about ten shillings, though he commonly expects or demands twenty." It is related of John Hunter that he once, when interrupted in his investigations by being obliged to visit a patient, threw down his instruments in a bad humor, exclaiming, "Now, I must go and earn a damned guinea."

The fees of physicians have evidently increased in amount in modern times. The greatest professional income of any single practitioner was probably that of Sir Astley Cooper, which for a time exceeded one hundred thousand dollars a year. He was once paid by a West India gentleman about five thousand dollars for an operation. For attendance at the same time, the consulting physicians, Drs. Lettsom and Nelson, each received about fifteen hundred dollars. The Empress Catharine, of Russia, paid, in 1768, as a fee to her physician for inoculating herself and son about sixty thousand dollars, an annual pension of two thousand dollars, and created him a Baron. The Emperor Joseph, of Austria, on his death-bed created his physician a Baron, and bequeathed him an annuity for life, amounting to ten thousand dollars.

In this country, the average amount of income received by the profession is very moderate, but there are in all large American cities those who receive yearly a very large sum. As an instance, for which we have the authority of the *Pacific Medical Journal*, the annual professional income of Dr. Toland, of San Francisco, is thirty-five thousand dollars. The largest single fees which we have recently known to be paid American surgeons were one thousand dollars for the operation of lithotomy, the same amount for an operation for vesico-vaginal fistula, and five hundred dollars for an operation for cataract.

Attempts have been made in different communities to fix a definite rate for compensation for medical services, but the impossibility of determining a market value for scientific attention to a patient, with its consequent anxiety and responsibility, has made the fee-bills very dissimilar and of little importance as authorities. In litigation, the attested evidence of physicians in regard to the prevalent custom

of charging seems to be received irrespective of any fee-bills. Perhaps the disinclination of the scientific practitioner to have the value of the performance of his duty estimated by money, has prevented much attention to the subject of fee-bills. However needful to him be the well-earned fee, he cannot feel it to be the immediate object of his devotion to the relief of human suffering, yet collaterally, it comes in as indeed an essential.

We believe that for the material interests of the profession, not enough attention has been given to schedules of charges for services. A fee-bill for the whole country, suited to its varied social conditions, would seem impracticable, but perhaps the American Medical Association might construct, with wide margins, an approximative standard.

In spite of fee-bills, practitioners will set their own pecuniary appreciation on their services. Like literary labor, medical attendance is worth in the market what it will bring. Grubb-street prices may overpay one class of literary scribblers, and the medical tyro, whose fate is to "learn to labor and to wait," may be recompensed by the experience gained in laboring and waiting.

A correspondent of the *Boston Medical Journal* expresses surprise that, although fee-bills have been adopted in various localities among us, and are occasionally referred to, yet they have never appeared in medical periodicals, and are consequently unknown to and inaccessible to the mass of the profession. The editors of the journal alluded to have suggested the propriety of publishing to the profession the fee-bills as they exist in the principal cities, and as their publication may be to many of our readers a matter of interest, and perhaps utility, we append in full the only table of charges which has been adopted by any medical organization in this city—that of the College of Physicians. It is probable that, by most practitioners in Philadelphia, it will be seen for the first time, as the charges for medical service have not been guided by any fee-bill. Following it, is added, for the purpose of comparison, a portion of the fee-bill of the Boston Medical Association:

FEE BILL OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

For a single visit or advice, in a case in which no further visits are required.....	\$5 to \$10
This is not intended to apply to those cases in which the physician is considered the regular medical attendant of the individual or family.	
For each visit, in a case in which the physician is in regular attendance, or for advice at his office.....	1 to 2
Every necessary visit on the same day to be charged, whatever may be their number, at the same rate.	
When detained, for each hour.....	3
For a visit at a time appointed by the patient or his friends, during the day time.....	2 to 5
For a written opinion or advice to a patient.....	5 to 20
For a visit at night, after ordinary bed time.....	5 to 10
For a visit as consulting physician.....	5
For each subsequent visit as consulting physician, in the same case.....	2
For a visit as consulting physician during the night, in visits to distant patients, one dollar to be charged for every mile beyond two from the residence of the physician, in addition to the ordinary charge, and \$2 additional for crossing the river Delaware.	10
An extra charge may be discretionally made for traveling at night, or on account of the badness of the roads, or the inclemency of the weather.	
For an opinion involving a question of law.....	10 to 50
For a post-mortem examination, in a case of legal investigation.....	25 to 50
For a post-mortem examination made at the request of the family or relatives of a deceased person.....	5 to 15
For a certificate of the state of health of an individual.....	5
For vaccination.....	5
For re-vaccination.....	2 to 5
For a case of midwifery.....	10 to 40
For the application of the forceps.....	10
For the operation of turning.....	10 to 20
For the operation of embryotomia.....	20
For any indisposition of the mother or child, after the tenth day from confinement, the charge for attendance as in ordinary cases requiring medical treatment. But when any serious ailment occurs in either mother or child within ten days, a charge is to be made for each visit as in other cases of disease.	
For reducing fractures, and the first dressing.....	10 to 20
For reducing recent luxations.....	10 to 30
For reducing old luxations.....	50
For removal of stone from the bladder.....	100 to 300
For amputation of a leg or arm.....	50
For amputation at the shoulder or hip-joint.....	100 to 200
For amputation of a finger or toe.....	10
For the extirpation of large tumors.....	50 to 100
For the extirpation of other tumors.....	10 to 50
For trepanning.....	50 to 100
For the operation for cataract.....	75 to 150
For other operations on the eye and its appendages, for the operation for aneurism, subclavian, carotid, femoral.....	10 to 50
For the operation for strangulated hernia.....	100 to 200
For the operation for hare lip.....	50 to 100
For the operation for fistula in ano.....	20 to 50
For fistula in perineo.....	50 to 100
For the operation for hemorrhoids.....	20 to 50
For the palliative operation for hydrocele.....	5 to 10
For the operation for the radical cure of hydrocele, for the operation for vesico-vaginal, or recto vaginal fistula.....	20 to 30
For the operation for phymosis and paraphimosis, for the introduction of the catheter, in ordinary cases.....	50 to 100
For the introduction of the catheter, in cases of obstruction.....	5 to 20
For division of stricture of the urethra.....	1 to 2
For the operation for artificial joint.....	10 to 20
For the operation for tracheotomy.....	10 to 50
For the operation for imperforate anus, vagina, &c., for the Caesarian operation.....	20 to 50
For the reduction of hernia by taxis.....	100
For extirpation of the tonsils.....	10 to 50
For the introduction of the stomach pump, in cases of poisoning.....	10 to 20
For the removal of foreign substances lodged in the pharynx or œsophagus.....	10 to 50
For the reduction of prolapsus ani.....	5 to 10

For examination per anum or vaginam.....	5 to 15
For the introduction of a pessary.....	5
For the introduction of a seton, or forming an issue.....	5
For tapping for ascites.....	10 to 20
In all surgical cases, the charge for subsequent attendance to be in proportion to the time occupied and the trouble incurred.	
It is recommended that in all cases of gonorrhœa and syphilis, a retaining fee of from \$10 to \$25 be required in advance, the subsequent charge being graduated by the amount of the after attendance in each case.	
Physicians should present their account at least annually, or as much oftener as they may deem proper.	

FEE BILL OF BOSTON MEDICAL SOCIETY.

In the present table there is named for each service the limits within which the fee shall be placed, though not designing to prohibit a higher charge where the time devoted, or the importance of the service rendered, should call for it; nor, on the other hand, to forbid a deduction to those in limited circumstances, in proportion to the exigencies of the case.

From the Fee table we take the following items:

For a visit.....	\$1 to \$2
For a visit and first consultation.....	5
For a visit and each subsequent do, if the attendance be continuous.....	3
For a visit out of town,* for every mile from the centre of Boston.....	1 to 2
For a visit out of town in consultation, the fee as above for a visit and consultation, with the addition for every mile except the first, of.....	1 to 2
In like manner, for every other service, when out of town, the fee for the service shall first be charged, and for every mile except the first.....	1 to 2
For rising in the night and visit.....	5 to 10
For rising in the night and visit in consultation.....	10
For advice at the physician's house, according to the importance of the case and the time occupied.....	1 to 10
For a letter of advice.....	5 to 10
For an opinion involving a question of law, in which a physician may be subpoenaed.....	10 to 50
For a post-mortem examination, in a case of legal investigation.....	20 to 50
For do, made at the request of the family or relations of the deceased.....	5 to 25
For a case of midwifery in the daytime.....	10 to 20
For do, if any part of the attendance be in the night, for capital operations, such as amputations of large limbs, lithotomy, lithotripsy, trepanning, extirpation of large tumors, operation for cataract, &c.....	15 to 25
For reducing luxations or fractures of small bones, for stitching recent wounds, opening large abscesses, and similar operations.....	50 to 200
For vaccine inoculation.....	5 to 10
For re-vaccination.....	2 to 5
It is recommended that in all cases of gonorrhœa and syphilis a retaining fee of from \$5 to \$10 be required in advance; the subsequent charges to be made as in ordinary cases of attendance or advice.	1 to 3

—O—

Canadian Act for the General Adoption of Vaccination.—An act has been adopted in Canada, which provides that the parents of every child shall have it vaccinated within three months after its birth. Vaccine physicians are to be appointed for each ward in cities, and convenient places fixed for the performance of the vaccination. The fee to the physicians, for each successful vaccination of poor persons, is to be twenty-five cents.

* If by railroad, from 50 cents to \$1 per mile, according to the time saved to the practitioner.

† The night, in this table, is considered as beginning at 10 o'clock P. M. and ending at 6 o'clock A. M., or at sunrise, when that is later than 6 o'clock A. M.

EDITORIAL NOTES AND COMMENTS.

The Death of Assistant-Surgeon Alexander.—From an official letter from the Surgeon of the First Pennsylvania Cavalry Regiment, directed to the Surgeon-General of the State of Pennsylvania, we extract an interesting account of the circumstances attending the wounding and subsequent death of Dr. Alexander. Dr. Alexander was a resident of Milroy, Mifflin county, Pennsylvania, where he was much respected and endeared to many friends. He had been but recently married.

The want of proper ambulances, alluded to in the letter, is unaccountable, as each Pennsylvania Reserve Regiment was furnished by the Surgeon-General of the State, with one four-wheeled, and two two-wheeled vehicles for the purpose.

Camp Pierpont, Va., Nov. 30, 1861.

"The skirmish in which Dr. Alexander was wounded, occurred about three miles this side of Dranesville, at about 8 A. M., on the 27th inst. The rebels were secreted in a thicket of pines, awaiting the approach of our regiment. Dr. Alexander and an orderly were about half a mile ahead of the column, and consequently received the first fire. The doctor was struck by a rifle shot in the left iliac region, the ball penetrating the abdominal walls. His clothing was pierced in several places, and his horse received several balls.

As the column approached, as yet unaware of the danger, the colonel and myself being at the head, received the first volley. At least twenty or thirty shots were fired at us, and although the enemy were within forty paces, neither of us were wounded. Our clothing was pierced in several places, and our horses shot; the colonel's killed. Our men quickly and fearlessly dashed into the woods, and in a few minutes killed three, wounded three, and drove the remaining forty or fifty away.

We brought our wounded with us. By the use of stimulants Dr. Alexander was enabled to ride on his horse to where we met the ambulances sent out to us. The doctor suffered extremely for forty-eight hours, when he was relieved by death from internal hemorrhage.

We are indebted to the Brigade-Surgeon for kindness and very efficient aid.

You ask if we need anything to minister to the comfort of the wounded; I believe not at present. Thanks to your care we were well supplied with instruments, etc., but we have not

yet received the ambulances you intended us to have. We have two old two-wheeled ambulances, which we got from the United States authorities, and if a little skirmish will fill them, we shall certainly need more. I would like to have a four-wheeled one, they are much easier. Dr. Alexander's greatest suffering was from the rough ride in the small ambulances.

I hope that you can send me an efficient Assistant-Surgeon. The cavalry service requires good assistants more than the infantry, from the fact that the regiment is so frequently divided."

The Illness of Prof. Von Graefe.—This great oculist was taken suddenly ill at Baden Baden, while on the point of commencing his bridal tour, and at last accounts was very low. The *Allgemeine Zeitung* says, that inquiries respecting his condition come by every mail from all parts of Europe, all uniting in the earnest wish that his life may be spared. He is the son of a surgeon, only 33 years of age, and is already far ahead of the oldest and most experienced of his art. He has already had over 100,000 cases under treatment, besides doing an incredible amount of other work. He publishes a periodical of the highest scientific character and authority in all matters pertaining to ophthalmology. His investigations of the origin and effects of the *cisticercus cellulosus* are entirely original. He is believed to have been the first to discover these parasites within the eye, and is the first, if not the only one, who has actually cut open the eyeball, drawn out the intruders, and saved the eye. He is also the inventor of a new instrument for illuminating the whole interior of the eye, by which the inner surfaces can be as perfectly examined as the outer. The theory of his new treatment is not yet fully developed, and his death at this time would be an almost irreparable loss to the scientific world.

The Philadelphia Hospital.—This is already one of the largest institutions of the kind in the country, but its capacity is too small for the proper accommodation of all the invalids who seek admission within its walls. An enlargement is greatly needed, and an appropriation of \$20,000 for the purpose of adding a new building in part, is asked from the Councils. The number of inmates has increased during the year thus far about ten per cent. over last, but the accommodations are not increased in

proportion. There are 103 beds in the men's surgical wards, while the number of patients at one time during last winter was 142. In the men's medical and venereal ward, there are 292 beds; in the women's wards, there are 219 beds; the greatest number of patients in the former at one time last winter was 301, in the latter 215. It is proposed, therefore, to remove the children's asylum to a new building which will increase the hospital room to the extent of 180 to 200 beds.

In the Insane Department, the removal of the old amphitheatre, and the erection of a new clinic room in closer proximity to the hospital, gives a much needed addition to the accommodations of that department, and promotes a better classification of the patients.

As a place for the study of disease in its worst and most aggravated and uncommon forms, the student of medicine will hardly find a place equal to the Philadelphia Hospital Clinic.

Widows and Orphans of Medical Men.—For nearly twenty years, there has been in existence in the city of New York an Association for the Relief of the Widows and Orphans of Medical Men. During that time, it has accumulated quite a large fund, amounting in September last to \$31,500, which is invested at 7 per cent. interest. The society numbers 109 members, of whom 71 are for life by the payment of \$100 at one time, and 33 are annual subscribers, paying \$10 per annum. Three families of its deceased members now receive aid from its funds. The receipts for the last year were \$2,606 87, the expenditures \$341.53. At its annual meeting held on Wednesday of last week, Dr. James Anderson was elected *President*; Drs. G. P. Camman, H. D. Bulkley, and Wm. Detmold, *Vice-Presidents*; Dr. J. W. G. Clements, *Secretary*; Dr. Edward L. Beadle, *Treasurer*; Jacob Hursen, Isaac E. Taylor, John R. Van Kluck, S. P. White, James R. Wood, J. O. Stone, and S. Conant Foster, *Managers*. The custom of the society has been to have an annual dinner, but this festivity was omitted on account of the state of the country. The roll of members includes all the more illustrious names of the profession. The object of the society is truly a commendable one.

The Sanitary Commission and the Medical Bureau.
—The discussion now in progress in the New

York papers between the friends of these two distinct organizations has developed several facts which are worthy to be recorded:

1. That the "Medical Bureau" is the Government organization for the Sanitary Department of the Army. At the head of this bureau stands Dr. Clement A. Finley as Surgeon-General.

2. That the Sanitary Commission is a voluntary organization, recognized by the Government as an important aid in carrying its sanitary regulations into effect, but having no authority other than the character and position of its members give. At the head of this organization stands the Rev. Dr. Bellows, a civilian.

3. That there is a regular Medical Purveyor appointed by the Government, under its Medical Bureau, whose business it is to attend solely to the distribution of supplies to the sick troops. Connected with the office, are a large number of employees, and the business is systematically conducted.

4. That the Surgeon-General has no power to appoint a "Board" to inquire into the qualifications of surgeons of Volunteer regiments, that being confided to a Medical Board in the various States. Complaints against these surgeons can, therefore, reach him effectually only through the Colonel of a regiment or General of a brigade.

5. A Medical Board, composed of the highest officers in service, is in daily session at Washington, to examine and pass upon such applicants as come before them for the post of surgeon or assistant-surgeon in the regular army.

6. That every military hospital is conducted upon a regular system; has a fund from which it supplies itself with delicacies, (greatly increased in number by the late act of Congress,) and even luxuries for the sick; that every needful comfort for the sick is supplied by Government, and that if any hospital lacks such, it is the fault of the head surgeon.

Government Hospital for the Insane.—From the report of the Secretary of the Interior, made to the Congress now in session, it appears that the appropriations made by Congress for the erection of buildings and improvement of the grounds of this institution have been expended with judgment and economy. The buildings are spacious, well ventilated and warmed, arranged with every convenience necessary for the health and comfort of patients, and in every respect well adapted to the purposes for

which they are designed. The grounds are in a fine state of improvement. Since the institution was opened in 1855, 439 persons have been treated. The number of patients in the house on the 30th of June, 1861, was 180, classified as follows:—From the army, 25; the navy, 11; the revenue-cutter service, 1; civil life, males, 72; females, 72. During the past year, 19 died, 63 were discharged, 48 of whom were completely recovered. The large per cent. of recoveries furnishes complete evidence of skill and care in treatment. The war has largely increased the burdens and responsibilities of the institution, and a portion of the building has been appropriated for the accommodation of the sick and wounded from the Potomac and Chesapeake fleets. About fifty of this class of persons have been admitted. The institution is under the superintendence of Dr. C. H. Nichols, an able and faithful officer.

Commencement at the Pittsfield (Mass.) Medical Institution.—The annual Commencement of this institution took place, on Tuesday, the 19th ult. The graduating class numbered fifteen, and passed the ordeal of their examination with great credit to themselves and their teachers. They were addressed by Professor Chadbourne, of Williams College, in a very able manner. The exercises of the day were concluded with a dinner at the Berkshire Hotel, of which the Faculty, the trustees, the graduates, the members of the Berkshire Medical Society, and a large number of invited guests partook. A most agreeable and satisfactory festival, we have no doubt. The new Medical College is said to be admirably located and complete in its exterior design and internal arrangements. It was built at a cost of \$30,000.

The Berkshire Medical Journal, which has been published at Pittsfield, Mass., expired with the completion of its first volume. We chronicle its death with regret. It was conducted with spirit and ability, and its columns gave us pleasure and profit. In his "last words," the editor says: "Our prospects might, at this time, be different, and we might now, perhaps, be girding ourselves anew to the work of journalizing, were our national affairs otherwise than they are. But this alone is reason enough for our duty to come to an end."

Tobacco.—The average amount of tobacco consumed in the whole world, averages nine ounces annually for each individual.

Correspondence.

BOSTON CORRESPONDENCE.

Society for Medical Improvement—Dr. Cotting's Case of Curvature of Spine—"What Is It?"—Inspection of Hospitals—Meeting of Sanitary Committee.

Boston, November 29th, 1861.

I have but little to note this week. It has been an uncomfortable wintry week; snowing, raining, and blowing by turns. But winter, as yet, has not touched us here, though the hills back in the northern part of New England are clad in their coats of ermine.

The Society for Medical Improvement met, as usual, on Monday evening last. Dr. Cotting, of Roxbury, reported a case, which is to be published in the *Journal*, and which presented many peculiar features. The patient was a young child, who gradually became so much bent backwards that she rested on the nates and the upper part of the forehead, the head being thrown back and closely applied to the scapula spine. As the case progressed, the stomach became very sensitive, rejecting everything, but the mind remained clear, and there was some power of locomotion. After her death, an autopsy revealed extensive disorganization of the bone about the ear, with a purulent collection in the vicinity. The difference between the position in this patient, and one who was very much bent back from opisthotonos, was shown to be very marked. In the former the spine alone was curved and arched, while in the latter the curve took in the whole body, and the patient rested on the heels and the vertex.

We have now here on exhibition the famous or infamous (just as you please) "What is it?" from Barnum's Museum. A measurement of the head of this creature was taken by one of the members of the Society, and, given in comparison with the measurement of an idiotic cranium, known as the Idiot of Cork. By this the head of the "What is it?" is much smaller in every respect, showing it to be one of the most remarkable instances of idiocy as yet known. In refutation of the statement of the showman that this creature was young, and had been caught but about fifteen months, one of the gentlemen present remarked that he saw this same exhibition in London nine years ago, and that there was the same evidences of age as were now noticed. It evidently belongs to the same race with the Aztec children, who have long since been decided to be only idiot dwarfs.

A very fine specimen of inflamed ovarian cyst was shown, which, during life, had all the symptoms of simple abscess of some of the internal integuments.

One of our most promising young physicians,

Dr. Robert Ware, has recently been appointed Inspector of Hospitals, under the authority of the Sanitary Commission. Dr. Ware possesses eminent qualifications for this work, and will no doubt serve his country faithfully and with profit.

A meeting of the Sanitary Committee was held here a few days ago, at which a general statement of the objects of the Commission was made, and an earnest appeal for further aid from the public put forth. There can be no doubt that great good may be done by this organization, in equalizing the distribution of the hospital supplies which are so readily contributed on all sides.

TRIMOUNT.

NEW YORK CORRESPONDENCE.

Pallida mors aequo pulsat pede pauperum tabernas Regumque turres.—HORACE.

Richard S. Kissam, M. D., an eminent physician and surgeon in this city, died last Thanksgiving day, of pneumonia, in the fifty-fourth year of his age. Those who are the doctor's immediate relatives are sufficiently aware of his conscientious practice; his untiring devotion to the calls of science; the high tone of every action, and his indefatigable perseverance in the profession of his choice. Few men, of modern times, have exhibited throughout their lives, such truthful, firm, and loyal friendship, as the doctor to those whom he selected as companions in his journey and as allies in his labors. Dr. Kissam's never-failing attendance on Dr. Francis, during his last illness of two long months, is sufficient to stamp his disinterestedness as sterling. "In 1838, Dr. Kissam performed the operation of transplantation of the cornea, in the presence of Drs. J. B. Kissam, Pratt, Roberts, and Paul. The patient was an Irishman, thirty-five years of age, one of whose eyes was totally lost. The other suffered from staphyloma with adhering iris. The cornea, transplanted, was taken from a pig six months old. His sight improved immediately after the operation, and continued so for two weeks; but, the humors being involved in disease, it was not perfect. The cornea remained transparent for a fortnight, when it lost its pellucidness, and in a month was absorbed. For full particulars, see "*New York Journal of Medicine*," for March, 1844, and Walton's *Operative Ophthalmic Surgery*, page 381.*

This was no ordinary operation. It indicated coolness, knowledge, and originality.

A member of the Academy of Medicine from its earliest inception, he ever maintained its laws and practiced its ethics. Calm and dignified he lived; prepared, and with a wonderful composure did he yield to the higher calls of Providential intervention. Interesting and

affecting is it, that his son, Corporal Astor Kissam, aged but fifteen years, was on the war path, fighting for his country; while his father was still in death, below, his voice no longer heard."

The proper resolutions were adopted by the several societies of which he was a member, and the New York Historical will commemorate the event by appropriate remarks on some future occasion. Our army now numbers some six hundred and sixty thousand patriots, in arms and ready—sixty thousand of whom are confined within the hospitals for various diseases.

Prof. Chapman, of Brooklyn, is busily engaged in making interesting experiments on divers animals, relative to toxicological effects and antidotes in general. The zealous doctor spares not in his search the domesticated cat, nor the playful wag of a "black and tan." For him even the cooing dove must be a sacrifice, and the modest mouse no longer nibbles cake with rich impunity. Go on doctor! May success and vast discoveries banish from your learned and original cerebral hemispheres the nocturnal visits of reproving ghosts, emanating from the dead remains of the inferior animals!

The table on which Magendie discovered "liver sugar," experimented on purchased pets, is now in the possession of Dr. Flint, at Bellevue Hospital College. This Institution is rapidly gaining ground. The present number of students is over one hundred. May the efforts of its well versed laborers prove, as well they may, sufficient to fill every bench, and bring in well fed dividends.

Dr. Sims, of the Women's Hospital, is expected to return in every steamer. During his absence Dr. Emmet has succeeded in many difficult operations, and proved himself equal to the undertaking. His colored illustrations of these local derangements evince talent, while they elucidate the principal with accuracy.

It is to be hoped that a large volume of the more intricate cases will be published ere long, called "*Surgery Simplified*."

GOURMET.

Independence, Iowa, Nov. 29, 1861.

DEAR SIR:—In the number of the MEDICAL AND SURGICAL REPORTER, for the 9th of November, in a case of scarlatina, recorded in the *Medical Times and Gazette*, you say "The idea of the contagion of scarlatina being conveyed by mail, and immediately affecting the recipient of the letter, is *prima facie*, absurd and preposterous." Now, from the history of the case, I do not understand that the effect was immediate, but an interval of twenty-four hours elapsed from the receipt of the letter to the sickening of the patient. Although a period of four days is the most usual for the development of the disease, yet many physicians, I suppose, have

**Hospital Hygiene* by V. M. Francis, M. D., page 27.

seen the incubations accomplished in one day, from exposure. From my experience of the phenomena of scarlatina in a practice extending back twenty years, I am prepared to give full credence to the circumstances set forth in the *Times* and *Gazette*.

[The point with us was not against the facts as narrated, but in regard to the medium of communicating the so-called "contagion."]

Almost all medical writers represent the poison of scarlatina as being one of the most persistent, penetrating, and subtle contagions, and next to variola in the certainty of affecting those exposed to its action. It may be communicated, not only by direct exposure to one laboring under the disease, but, also, by fomites, and through the medium of a second person, who may transmit the poison by his clothing or person. To illustrate, I will cite a few examples;

A child died of scarlatina; was placed in its coffin, and conveyed thirty miles to the town, where its relatives resided, which was previously entirely free from the disease. The children of the neighborhood, to the number of a dozen, assembled at the house to take a last view of the face of their former little friend. The coffin was opened in a bedroom, and the children allowed to look in. Of this number, more than one-half sickened with the disease, from whom it spread over the town. A lady had been in another quarter of the city nursing the child of a friend which died of scarlatina, coming home she communicated the poison from her clothes or person to a grandson, who died in a short time. An only child, a daughter, aged nine years, was prevented, by her parents, from visiting the last named, her little cousin, while sick with the disease, until after his death and burial; when, on the day after the funeral, she was permitted to visit the house for a very few minutes only, and in about four days she sickened and had a narrow escape with life.

A physician being in attendance upon a family of three children, affected with scarlatina anginosa, was called into a neighborhood six miles distant from any known case of the disease to attend a young woman in her first labor. He, without a change of clothes, waited upon her during a safe and easy delivery. Four days after, she was attacked with scarlatina, and likewise the child soon after. I need hardly add, the woman in a few days died—for such cases are almost uniformly fatal—but the child recovered. From such experience I do not hesitate to assert, that physicians attending on parturients without a proper change of raiment and ablution, after visiting patients affected with a malignant type of this disease, are as morally guilty as they would be in case of variola or malignant erysipelas, and that the same cautions should be observed in the one as in the other. Now, if scarlatina may be communicated by fomites, or by the clothing of a second person, then why not by letter? I confess I can see nothing "absurd" or "preposterous" in it.

And the moral to be drawn from these examples is, that we should be extremely cautious in our professional intercourse, lest we convey malignant and contagious diseases to our confiding and unsuspecting patients, our families, and our friends. JOHN G. HOUSE, M. D.

Arsenic and Quinine Alternately in Fever.

MESSRS. EDITORS:—The following, perhaps, will not be uninteresting to some of your numerous readers, especially in the West.

I was called to see a lady, about four weeks ago, a Mrs. S., æt. 28, mother of two children.

Physical Appearance.—Small in stature; spare habit; much emaciated, weighing about 96 pounds; countenance flushed; respiration hurried; pulse quick, and frequent headach, with a sense of tightness above the eyebrows; skin dry and husky; tongue dry, and coated in center; taste bitter; nausea; considerable gastro intestinal irritation; bowels passive. Feels much better in the forenoon, with an aggravation of all the symptoms in the afternoon.

Antecedent History.—One year ago she contracted a typhoid fever, (so called,) which confined her to bed for nine weeks. Her attending physician was one of those deciduous advocates of Samuel Hahnemann of Leipsic. Since then she has enjoyed very poor health, and has had one miscarriage. She stated she felt precisely the same symptoms the fall previous, when she lay the nine weeks, which greatly depressed her spirits, for she felt that she would never survive nine more. I was asked, "Was it typhoid fever?" I said I did not regard it as such, but as a genuine case of remittent fever. And I accordingly commenced the treatment with the following:

R	Spt. mindereri,		
	Syr. pruni virgin, aa	℥iss.	
	Liq. pot. arsenitis,	℥ij.	
	Liq. morphia sulph. (Mag.)	℥i.	M
R	Sub. nit. bis.,		
	Sacch. alb., aa	℥ii.	
	Quinæ sulph.	gr. x.	
	Ft. chart, No. X.		M

A tea-spoonful of the mixture, and one of the ten powders, was ordered every alternate two hours—except at night, when she rested well, they were to be omitted,

On the following day there was but little alteration in the symptoms. Continue the same.

Third day, a perceptible change for the better. Fourth day, more perceptible yet. Fifth day, doing first rate. Suffice it to say—seventh day, she was *convalescent*. After which a tonic, wine, nourishment, etc., etc.

I am aware that Fowler's solution was heretofore used, and highly praised, in remittent fever, but never heard of quinine being used alternately with it. Give us some information on the subject, and much oblige,

Yours, most respectfully,

LEWIS GAYNOR, M. D.

New Britain, Conn.

NEWS AND MISCELLANY.

Government Hospitals in Philadelphia.—The Government, we are informed, have selected the following locations in different parts of the city, for military hospitals:

The railroad depot, at the southeast corner of Broad and Cherry streets, formerly occupied by the Reading Railroad Company as a freight depot. The building is four stories in height, having a front of some hundred feet on Broad street, with an arched gateway and railroad turnout leading directly to the entrance to the wards, requiring no change of cars from Baltimore. This building will accommodate from six to eight hundred patients.

The large manufactory at the corner of Calowhill and Twenty-second streets, formerly used by Messrs. Pugh & Curry, makers of paper hangings, consisting of the entire premises, with the exception of a small part used for storing the valuable machinery. This will give accommodations for about three hundred.

The silk manufactory of Messrs Lewis & Brother, Twenty-third and Lombard streets, which will hold from two to three hundred.

The large carriage manufactory of Messrs. Dunlap & Brother, at the junction of Fifth street and Old York avenue, corner of Buttonwood street, a building some five stories in height, and which will hold in the neighborhood of four hundred.

Each of these buildings is undergoing the necessary alterations to make them convenient for hospitals, and will be ready in a few days for the accommodation of the sick and wounded. Their location is not open to the objections brought by the Board of Health against that on Water street below Arch, which, we are glad to observe, is abandoned, if it was ever determined upon.

Surgeons of the Second Naval Expedition.—Medical Director, Dr. W. H. Church, of New York. 51st Reg. N. Y. Vols., Surg., Dr. E. W. Buck, Assist. Surg., Dr. C. W. Torrey. 53d Reg. N. Y. Vols., Surg., Dr. H. J. Phillips, Assist. Surg., Dr. Dubreuil. 23d Reg. Mass. Vols., Surg., Dr. Geo. Derby; Assist. Surg., Dr. Silas E. Stone. 24th Reg. Mass. Vols., Surg., Dr. Sam. A. Green; Assist. Surg., Dr. Hall Curtis. 25th Reg. Mass. Vols., Surg., Dr. J. Marcus Rice; Assist. Surg., Dr. Theron Temple. 27th Reg. Mass. Vols., Surg. Dr. Geo. A. Otis; Assist. Surg., Dr. Samuel Camp. 8th Reg. Ct. Vols., Surg., Dr. De Witt C. Lathrop; Assist. Surg., Dr. J. V. Harrington. 10th Reg. Ct. Vols., Surg., Dr. A. T. Douglas; Assist. Surg., Dr. M. F. Newton. 55th Reg. Penn. Vols., Surg., Dr. Livergood; Assist. Surg., Dr. Noble.

The number of Federal Soldiers now on the sick list in the various camps and hospitals of the country is estimated at 60,000, or about twelve in each hundred.

Fevers at Fortress Monroe.—An army surgeon writes: The fevers here are the most refractory I have ever witnessed, resisting the best remedial agents. Quinine is wholly ineffectual in all its stages, but is still to be commended as a prophylactic and tonic substance. Emesis, the more powerful the better, I have learned to be the only reliable treatment in the initial stage of typhoid. Even if nothing else is done, this will suffice to place the disease under what we may term "control;" and without it you may as well confess yourself, at a very early point in its progress, vanquished.

Graduates at the Berkshire Medical College.—The following gentlemen received the degree of doctor of medicine at the Berkshire Medical College, at the close of the session of 1861, after examination: David De Los Bowen, John Thomas Benham, David Foss, George Washington Gale, Jr., Lucius Barstow Irish, Robert Hazard Morey, Louis Edwin Norris, Nathaniel Morton Ransom, Samuel Kenrick Rich, Myron Winslow Robinson, Frank Augustus Sabin, Joel Stevens, Charles Elliot Streeter, Augustus Van Cleef, and Nathan Hand Wright; and Robert William Gray, M. D. Bowdoin, *ad eundem*. We are too early in press for further particulars.—*Berkshire Med. Jonr.*

Small-Pox among the Soldiers.—We have been informed by the Surgeon-General that there are a few cases of small-pox at one of the camps in this State, and would again remind the profession that there is still a need of vaccine matter, which should be directed to the Surgeon-General's Office, No. 1112 Walnut street, Philadelphia.

Navy Surgeons appointed.—Since the last publication the following gentlemen have passed a successful examination before the Naval Medical Board, viz: Thomas A. Penrose, of Pa.; Samuel W. Abbott, Mass.; Edward C. Van Meulin, of N. J.; Thomas Hiland, of N. H.; Newton H. Adams, and Geo. D. Slocum, of N. Y. Since the first of August fifty-four persons have been passed by the Board.

Schuylkill County Surgeons.—This county has seven newly appointed surgeons in the army, and two in the navy. Four of the former are Brigade Surgeons under Generals McClellan, Sherman, Rosencrans, and Halleck, respectively. Their names are as follows: Dr. McKibbin, now at Port Royal; Dr. R. S. Webber, who has just returned from duty on the coast of Brazil; Dr. H. A. Silliman, who was at the Bull Run battle; Dr. H. Parry, now chief resident of the large hospital in Washington; Dr. John Carpenter, who has charge of a hospital in Western Va.; Drs. Robbins, Bland, Douglas, Bannan, and J. Burd Peale.

Buffalo Medical College.—A correspondent informs us that there are about seventy students in attendance at that College this winter.

